KUZYAK, B. ; STCHEENKA, V.S.

    M c regulation of the Stard. review machine. Saportation.
    Study SOVCHERT za 1962 g. izd-vo 1964.   (P R R 4)

BOGDASHIN, A.S.; BOGORODSKIY, A.A.; VINOGRAT, M.B.; GORBUNOV, V.I.;
GORBUNOV, V.R.; DUROV, V.K.; YERMAKOV, A.L.; IVANOV, A.A.;
KARAKOVA, N.I.; KOBYLYAKOV, L.M.; KOZLOVSKIY, N.I.; MARAKHTANOV,
K.P.; MIRUMYAN, G.N.; NECHETOV, G.P.; NOVIKOV, A.G.; OL'KHOVSKIY,
K.I.; PESTRYAKOV, A.I.; POLAPANOV, A.V.; SKLYAREVSKAYA, Ye.Kh.;
SOLDATENKOV, S.I.; SOROKIN, Ye.M.; TRUSHINA, Z.V.; FEDOROV, P.F.;
FEDOSEYEV, A.M.; FROG, N.P.; SHAMAYEV, G.P.; YANOVSKIY, V.Ya.;
ORLKHOV, A.D., spetered.; DEYEVA, V.M., tekhn.red.

[Handbook on new agricultural machinery] Spravochnik po novoi
tekhnike v sel'skom khozinistve. Moskva, Gos.izd-vo sel'khoz.
lit-ry, 1959. 364 p.   (MIRA 13:2)
                (Agricultural machinery)

GORBUNOV, V.I., inzh.; MIRUMYAN, G.N., inzh.; YAKOVSKIY, V.Ya.,
inzh.; IVANOV, A.A., inzh.; YERMAKOV, A.L., inzh.; FEDOCOV,
P.F., inzh.; LARYUKHINA, G.G., inzh.; NECHETOV, G.F., inzh.;
NOVIKOV, A.G., inzh.; DUROV, V.K., inzh.; BARSUKOV, A.F.,
red.; PECHENKIN, I.V., tekhn. red.

[New tractors and agricultural machines; test results of 1957]
Novye traktory i sel'skokhoziaistvennye mashiny; rezul'taty
ispytanii 1957 goda. Moskva, M-vo sel'.khoz.SSSR. No.3. 1959.
350 p.   (MIRA 15:10)

1. Russia (1923- U.S.S.R.)Glavnoye upravleniye mekhanizatsii
i elektrifikatsii sel'skogo khozyaystva.
                  (Agricultural machinery)

14(10)

SOV/99-59-6-13/13

AUTHOR: Sharov, N.A., Engineer

TITLE: Conference on Problems of Crop Irrigation Mechani-
zation in the USSR

PERIODICAL: Gidrotekhnika i melioratsiya, 1959, Nr 6, pp 61-64,
(USSR)

ABSTRACT: The article describes the Conference on Problems of
Crops Irrigation Mechanization in the USSR called
by the Vsesoyuznyy nauchno-issledovatel'skiy insti-
tut mekhanizatsii sel'skogo khozyaystva (All-Union
Research Institute of Agriculture Mechanization)
and held in Moscow from March 18 to 21, 1959. The
conference was dedicated to problems of sprinkling.
The following organizations were represented in it:
research institutes, water economy corporations,
institutions of higher learning, special design
offices, planning organizations, industrial enter-
prises from the Uzbek, Ukrainian, Azerbaydzhan,

Card 1/4

SO7/99-59-6-13/13

Conference on Problems of Crop Irrigation Mechanization in the
USSR

Georgian, Kirgiz, Kazakh, Turkmen, and the Moldavian
SSR, the RSFSR, as well as the Gosudarstvennyy Nauch-
no-tekhnicheskiy komitet pri Sovete Ministrov SSSR
(State Scientific and Technical Committee Attached
to the Ministers Council of the USSR), the Giprovodk-
hoz, and the Ministerstvo sel'skogo khozyaystva SSSR
(Ministry of Agriculture of the USSR). In all, the
conference was attended by more than 100 specialists
and representatives of at least 53 organizations.
The conference had its past developments summed up
and made several decisions to promote irrigation
mechanization. The following reports were delivered
there: A.V. Krasnichenko, Director of the VISKhOM,
made an introductory speech, S.I. Nechetov, Senior
Engineer of the Upravleniye novoy tekhniki i ispy-
taniya mashin MSKh SSSR (New Equipment and Machinery

Card 2/4

SOV/99-59-6-13/13

Conference on Problems of Crop Irrigation Mechanization in the
USSR

Card 3/4

Testing Administration of the MSKh USSR), lectured
on "Present-Day Condition and Work Outlook for the
Creation of New Sprinklers"; Candidate of Tech-
nical Sciences B.M. Lebedev, VISKhOM, - on his insti-
tute's laboratory work; Candidate of Technical
Sciences S.Kh.Guseyn-Zade, Representative of the
AzNIIGiM, - on sprinkling in the Azerbaydzhan SSR;
Candidate of Technical Sciences V.I. Kil'nitskiy,
GruzNIIGiM, - on sprinkling in the Georgian SSR;
N.I. Rychkov, Manager of the Irrigation Engineering
Section of the Moskovskaya opytno-issledovatel'skaya
dozhdeval'naya stantsiya (Moscow Station for Testing
and Sprinkling Research), - on sprinkling in the
Moskovskaya Oblast'; V.I. Bogdanovich, Senior Scien-
tific Worker of the UkrNIIGiM, - on sprinkling in
the Ukraine; V.I. Vitte, Senior Scientific Worker

SCV/99-59-6-15/15

Conference on Problems of Crop Irrigation Mechanization in the USSR

and representative of the YuzhNIIGiM, - on sprink-
ling mechanization; A.N. Koryagin, Scientific Worker
of the Institut sel'skogo khozyaystva imeni Doku-
chayeva (Institute of Africulture imeni Dokuchayev),
-on a mobile sprinkling system in the Central Cher-
nozem Zone; D.I. Sazonov, Chief Agronomist of the
Magnitogorskiy molochno-ovoshchnyy sovkhoz (Magni-
togorsk Milk and Vegetable-Growing Sovkhoz), - on
on sprinkling vegetables and potatoes in Southern
Ural; Engineer-Hydrotechnician F.N. Yur'yev - on
sprinkling cotton at the Sovkhoz "Pakhta-Aral", with
an expedition of the SANIIRI doing appraisal work.

ASSOCIATION: Glavodkhoz MSKh SSSR

Card 4/4

USCOMM.-DC-61,002

NECHETSKAYA, R. M.

NECHETSKAYA, R. M. --"Use of Streptomycin to cure Experimental Primary Pneumonic
Plague." *(Dissertation for Degrees in **Science** and Engineering Defense at Six
Higher Educational Institutions. **Min** of Health Protection USSR, State Sci Res
Inst Of Microbiology and Epidemology of Southeast USSR ("Mizro". Saratov.

SO: Knizhnaya Letopis' NO. 25, 1957 55

* For degree of Candidate in Medical Science

NECHETSKAYA,R.M.; KOLESINSKAYA, N.I.

Relation between the immunogenicity and the quantity of live
microbes in dry antiplague vaccine. Dokl. Irk. gos. .... .-
issl. protivochum. inst. no.5:41-42 '63   (IRA ...)

NECHETSKAYA, R.M.; ZAYTSEVA, L.D.; GOLUBINSKIY, Ye.P.; KOLESINSKAYA, N.I.

Viability of aerated bouillon cultures. Dokl. Irk. gos. nauch.-
issl. protivochum. inst. no.5:43-44 '63   (MIRA 18:1)

NECHETSKAYA, R.M.; KOLESINSKAYA, N.I.; KALMYKOVA, A.P.; GOLUBINSKIY, Ye.P.
    ZAYTSEVA, L.D.

Dynamics of the multiplication of strain EB of the plague microbe
in an aerated fluid medium. Dokl. Irk. gos. nauch.-issl. protivochum.
inst. no.5:45-47 '63   (MIRA 18:1)

MIKHALEVA, V. Yu.; KOLESINCKAYA, N.I.; NECHETSKAYA, R.M.

Relation of microbe viability in antiplague vaccine to the age of the plated aerated culture. Dokl. Irk. gos. nauch.- issl. protivochum. inst. no.5:36-40 '63   (MIRA 18:1)

NECHEUKHIN, V.M.

Pumpellyite and pumpellyite-bearing rocks from the Sibay deposit region
(Southern Urals). Zap.Vses.min.ob-va 92 no.1:103-107 '63.

(MIRA 16:4)

1. Gorno-geologicheskij institut Ural'skogo filiala AN SSSR, Sverdlovsk.
(Baymak District—Pumpellyite)

IVANOV, S.N.; NECHEPRHIN, V.M.

Time of the premain collic demotion and the origin of acidum and
the essentially potessium igneous socies in the geosyncline
formations of the Ural Mountains. Dokl. AN SSSR 157 no.3:593-
596 Jl '64.   (MIRA 17:7)

1. Institut geologii AN Bashk. filiala AN SSSR. Predstavleno
akademikom I.S. Kornin kim.

NECHEV, A.D.

Find of calcium fluoride gel in the Slavyanka deposit of the Bulgarian People's Republic. Sov. geol. 3 no. 11:156 N '60.

(MIRA 13:12)

(Bulgaria--Calcium fluoride)

BULGARIA

MEDVEV, Ihr.

"Radioactive Fallout and Its Effects on the General Radioactivity Background"

Sofia, Rentgenologiya i Radiologiya, Vol 5, No 1, 1965, pp 40-44

Abstract: The subject of radioactive fallout in consequence of nuclear explosions is discussed, mainly on the basis of data given in the literature. With respect to $Sr90$, it is stated that absorption of this isotope by human beings is to 5% from water and to 95% from food products. In countries with a large milk consumption, $Sr90$ is absorbed mainly from milk and dairy products. In Japan this isotope is introduced into the organism largely through the consumption of rice. In the USSR $Sr90$ is absorbed to 70% on the average (50 to 90%) from bread and to 16% from milk (from 5% in Uzbekistan to 37% in the Baltic region). With respect to Bulgaria, it is stated that $Sr90$ is absorbed mainly from bread (the source for this is not given). Table, 12 references(7 USSR, 5 Western). Russian and English summaries. Manuscript received April 64.

1/1

On the Structure of the Core and the Central Regions of Extensive Atmospheric Showers at Sea Level

showers were recorded, with particle numbers of between 10^4 and 10^6, and axes which were at a distance of up to 30 m from the system of ionization chambers. From the manifold material obtained by these investigations the spatial distribution obtained for individual showers or groups of showers (classification according to particle number N) are analyzed. For spatial particle flux density it holds that $\varrho(r) \approx 2.10^{-3} N/r$ for $r < 10$ m for the energy flux density: $\varrho_E(r) \sim r^{-n}$. For shower groups of different sizes (ΔN from $1.0.10^5 - 5.0.10^5$ up to $5.10^5 - 5.10^5$) table 1 shows how many of the total of 82 investigated showers correspond to certain n-values (from < 0.8 to $3.2 - 3.4$). Figure 2 (a,b) shows the spatial distribution of the energy flux of electron-photon and nuclear-active components of two different shower groups, figure 3 shows the energy spectrum of the nuclear-active component in the shower cores, and figure 4 shows the distribution of the absolute values of the energy flux of the electron-photon component in a circle with the radius 1.5 m round the axis of a shower with $N = 10^5$ particles. The diagram is characteristic of the strong oscillations of

Card 2/4

SOV/16-16-4-1, 70

On the Structure of the Core and the Central Regions of Extensive Atmospheric Showers at Sea Level

served. Figure 5 finally shows the spatial energy flux distribution within the range of from 0.1 to 30 m; the measured values (in a semilogarithmic diagram) are practically on a steeply declining straight line. Thus, the following is obtained for the electron-photon component:

$$Q_{e-ph} \sim 1/r^{1.35} \qquad \text{at} \quad 0.1 \text{ m} < r < 2.0 \text{ m}$$

$$Q_{e-ph} \sim 1/r^{2} \qquad \text{at} \quad 2.0 \text{ m} < r < 30 \text{ m}$$

and for the nuclear-active component: $Q_{n-a} \sim 1/r^{2}$ at 0.2m $< r <$ 30m.

Figure 6 again shows the spatial distribution of the absolute values of energy flux in a distance of 10 m from the shower core; like within the range of the core itself, the variations are considerable. The authors finally thank G. T.Zatsepin and I. P. Ivanenko for advice and discussions. There are 6 figures, 3 tables, and 3 Soviet references.

ASSOCIATION: Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta (Institute for Nuclear Physics of Moscow State University)

Card 3/4

CHELARU, Jann, ing.; MECHIFLRESCU, Virgilia, ing.

Physical and mechanical characteristics of fine and semifine Rumanian wools. Ind text ur 14 no.10:441-443 S '63.

NECHIN, Yu. A.

$1\frac{3}{9}$ _emf_

537.591.15

7502.   INVESTIGATION OF THE STRUCTURE OF EXTEN-
SIVE AIR SHOWERS AT SEA LEVEL. A.T.Abrosimov,
A.A.Bednyakov, V.I.Zatsepin, Yu.A.Nechin, V.I.Solov'eva,
G.B.Khristiansen and P.S.Chikin.
Zh. eksper. teor. Fiz., Vol. 29, No. 5(11), 693-6 (1955).
In Russian. English translation in: Soviet Physics JETP
(New York) Vol. 2, No. 2, 357-60 (March, 1956).
      56 groups of 24 counters, each group containing counters
of either 24 100 or 330 cm² area, all hodoscoped, together
with 4 penetrating-particle detectors have been suitably
spaced at sea level and at the Pamir (3860 m) to study the
distribution of the electronic and of the nuclear interacting
shower particles. The authors are satisfied that they can
determine the position of the shower axis within 1 m. Results
have been obtained by averaging over a number of showers in
narrow size (N) intervals. At distances from the core of 2 to
10 m the spatial electron distribution can be described by
$1/r^n$, where n = 0.93 ± 0.08 for showers with $\bar{N}$ = 10^5,
n = 1.0 ± 0.05 for showers with $\bar{N}$ = 4 x 10^5. Nuclear inter-
acting particles in the interval 1.5 x 10^6 to 4 x 10^5 follow a
curve $1/r^n$, with n = 1.1 ± 0.2. The importance of the presence
at sea level of a sharp core as well as the identity of
results obtained at sea level and at 3860 m is pointed out.
                                        E.W.Kellermann

Nechin, Yu. A.

SEA-LEVEL STUDIES OF THE HIGH-ENERGY NUCLEAR-ACTIVE COMPONENT OF EXTENSIVE AIR SHOWERS

S. N. Vernov, N. N. Goryunov, V. A. Dmitriyev, G. B. Kulikov, Yu. A. Nechin, G. B. Kristiansen

1. High-energy nuclear-active particles were detected by large bursts produced in ionization chambers by these nuclear-active particles during passage through a composite filter of lead and graphite. The use of a composite filter permits firstly, of separating, in the best possible fashion, the ionization produced in the chambers by the electron-photon component (which appears in the filter due to nuclear-active particles) from the ionization created by the electron-photon component of the shower coming from the air. On the other hand, the use of such a filter gives rise to a situation when the ionization in the chambers turns out to be proportional to the total energy transferred from the nuclear-active particle to the electron-photon component in the filter. So, the energy of a nuclear-active particle can be determined from the burst in the ionization chamber on the basis of rather general considerations.

NECHIN, YU. A.

A STUDY OF THE SPATIAL DISTRIBUTION FUNCTION OF ELECTRONS AND THE DENSITY OF
ENERGY FLUX OF THE ELECTRON-PHOTON COMPONENT IN EXTENSIVE AIR SHOWERS
N.N. Goryunov, V.A. Dmitriyev, G.V. Kulikov, Yu. A. Nechin, G.B. Khristiansen

1. The spatial distribution of density of energy fluxes of the electron-
photon component was determined from transition curves in lead obtained for
different distances from the shower axis; the spatial distribution of particle
fluxes was obtained by the method of correlated hodoscopes.

2. The spatial distribution of the density of energy flux of the electron-
photon component was obtained up to $r = 60$ m from the shower axis in extensive
air showers with the total number of particles $N = 10^4 - 2 \times 10^6$. The form of
the function is independent of the strength of the shower and, if we approxi-
mate this function by a power law of the type r^{-n}, we obtain

$$n = 1.2 \pm 0.2 \qquad 0.3 \text{ m} \cdot r \text{ 1 m}$$
$$n = 1.5 \pm 0.2 \qquad 1 \text{ m} \cdot r \text{ 10 m}$$
$$n = 2.0 \pm 0.3 \qquad 10 \text{ m} \cdot r < 60 \text{ m}$$

Report presented at the International Cosmic Ray Conference, Moscow, 6-11
July 1959

NECHIN, Yu.A

GENERAL DESCRIPT[ION] [OF] THE [MOSCOW] UNIV[ERSITY] [APPARATUS] [FOR] [EXT]
(TENSIVE AIR SHOWERS AND RELIMINARY RESULTS OF AIMS OF IT

S.N. Vernov, G.B. Kristiansen, A.T. Abrosimov, N.N. Goryunov, V.A. Dmitriev,
G.V. Kulikov, Yu.A. Nechin, S. . [Verdiev], V.I. Solovyeva, K.I. Solov ov, N. . Strel-
galsky, B.A. Khrenov

1. In late 1957, at the Moscow State University an arrangement was put into opera-
tion for multipurpose studies of extensive air showers of cosmic ray .

2. The arrangement is a complex assembly of simultaneously operating physical
instruments (some 5000 Geiger-Müller counters covering an area of over .000 m2, and
some 150 inoization chambers of various shapes covering a total area of .3 m2, and
a diffusion chamber of area 0.04 m2) and appropriate electronic equipment and photo-
graphic devices to record the instrument readings when an extensive air shower passes
through the arrangement. Most of this equipment is located in a specially erected
building. Three rooms of this building (~40 sq.m. in area each) have a light roofing
of not more than 1.5 g cm2 and two rooms (25 m2 and 50 m2) are situated underground
at a depth corresponding to 20 and 40 metres water equivalent.

report presented at the International Cosmic Ray Conference, Moscow, 6-11 July 1959.

NECHIN, Yu.A.

3.2410 (1559, 2305, 2205, 3805)

/151/
S/627/60-00./000/00./027
D294/D304

AUTHORS: Vernov, S. N., Khristiansen, G.B., Abrosimov, A. T.,
Goryunov, N. N., Dmitriyev, V. A., Kulikov, G. B.,
Nechin, Yu. A., Sokolov, S. P. (deceased), Solov'yeva,
V. I., Solov'yov, K. I., Strugalskly, Z. S., and
Khrenov, B. A.

TITLE: General description of the setup used for studying ex-
tensive air showers and the provisional results ob-
tained

SOURCE: International Conference on Cosmic Radiation, Moscow,
1959. Trudy. v. 2. Shirokiye atmosfernyye livni i kas-
kadnyye protsessy, 5-16

TEXT. A complex experimental setup was installed at Moscow State
University, consisting of a simultaneously operating physical appa-
ratus plus the corresponding radiotechnical equipment and photo-
graphical recording devices. The setup incorporates over 500 Gei-
ger-Muller counters (forming a hodoscope), about 150 ionization

Card 1/7

General description of the set......   ....

...mbers and a large diff...   ...ter. The ... ...
...pre...sive and simultane..   ...tifit.. ..f ... ...
nents (electrons and photon... ...ar-s the part.... ... .f...
of extensive air shower. ... ...vel. The setup ... le... .. in ...
different configurati... ... the ..rst at the e..d of .e..., ...
...ond at the beginning of .... Be...w, only the re.... ... ... by
means of the first setup are ... br.ed. The set... ... ... is
a special building and in 10 mott... ...t ... ...
registered by the system of ....ed .ounter.. P... ... ...
...ters were shielded (these for dete.ting the ... ...
and the μ-mesons) and the other counters were not sh...ded. T.. io-
nization chambers served to determine the later... ... . of
the electron-photon component and of the nucleon.. ... .
The microstructure of the electron component was ..t fie... of ... ...
of the diffusion chamber. Special measures were t.... to en...
continuous and prolonged operation of the set... The main ...i... ..f
the setup were automatically controlled, in particul.r the supply
units and the photography system. The operation of the setup (as a
whole) was controlled (triggered) by a selection system; in parti-

Card 2/7

General description of the setup ...   D299/D304

...lar, the showers were selected in accordance with the density of
the electron flow and of the μ-mesons. The setup was in operation
for about 2500 hours, yielding a large amount of experimental data
which are still being processed. The probability theory (Baye's
theorem) was used for determining the x,y -axes and the number of
particles N of the shower; in addition the distribution function
f(r) as well as other distribution functions were determined (r de-
noting distance). The values of x, y and N were found by means of
a special electronic simulator. The density distribution of elec-
trons and mesons was determined by means of : ruia

$$W(\rho) = \prod_i \left[1 - \exp(- \rho\sigma_i)\right]^{m_i} \cdot \exp\left[- \rho\sigma_i(n_i - m_i)\right]$$

where m_i is the number of counters which operate over an area σ_i,
and n_i - the overall number of such counters. The energy E of the
electron-photon component was determined by means of ionization

Card 3/7

... with ... and ...

... ... a fairly ... ... showers at sea level. ... ... particle flow in the individual ... ... found that the lateral distribution ... from shower to shower; the average ... ... cm to 100 m, as follows:

$$\rho(r) = \frac{K \cdot N}{r^{0.6}} \quad K_1 = 3.3 \cdot 10^{-3}, \quad 0.0 < r < 0.1 \text{ m}$$

Card 4/7

General description of the setup ...
$$\begin{array}{l} 31519 \\ S/627/6 \text{·}/002/ \text{···}/ \text{··}/027 \\ D299/D304 \end{array}$$

$$\left(\frac{K_2 N}{r} \cdot e^{-\frac{r}{60}} \right., \quad K_2 = 2 \cdot 10^{-3}, \quad 0,3 < r < 1 \text{··} \text{ m}$$

The internal distribution of the electron-photon components also fluctuates from shower to shower. At distances smaller than ·.· m, these fluctuations are particularly sharp. The nuclearactive components also exhibits considerable energy fluctuations. The fluctuations in the high-energy μ-mesons were not yet analyzed. The energy of the electron-photon component E_{eph} was calculated for a shower with number of particles equal to $(2.7 \pm 0.2) \cdot N3$, where 3 is the critical energy for air (72 Mev). The above value was obtained with an accuracy of appr. 30%. It was found that the energy of the nuclearactive component $E_n \approx (0.5$ to $1.0) E_{eph}$. This value is, however, subject to considerable fluctuations and the experimental data are as yet insufficient to determine the contribution of the

Card 5/7

General description of the setup...

31519
3/62" 60/002 305 20 027
D294/5?-04

... nearactive component in showers. In addition, the above-mentioned fluctuations severely delimit the choice of a theoretical model for the development of showers. Particular attention was devoted to the structure of the shower in the immediate vicinity of its axis, where the particles of highest (for the particular shower) energy should be concentrated. This led to the discovery of a new effect: Groups of particles (from 4 to 20) travel in narrow beams (not exceeding 8 cm in diameter) in the neighborhood of the axis (or along the axis itself), whereby their lateral distribution shows that the beams are not due to Poisson fluctuations. The new effect can be explained as follows: Either the beam is the core of a "young" electron-photon shower which originates from a high-energy π^0-meson at a certain distance from the apparatus, or the beam consists of μ-mesons. These two possibilities are discussed. The observed irregularity in the lateral distribution of μ-mesons in the vicinity of the shower axis might be related to the new effect. There are 6 figures and 2 tables.

Card 6/7

General description of the setup ...   S/627/60/002, 000/000, 027
                                         D293/D304

ASSOCIATION: Hauchno-issledovatl'skiy institut yadernoy fiziki
MGU, Moskva (Scientific Research Institute of Nucle-
ar Physics Moscow State University, Moscow)

Card 7/7

NECHIN, YU. A.

3.3410 (1559, 2305, 2705)

11526
S/627/60/002/000/008/027
D299/D305

AUTHORS: Vernov, S. N., Goryunov, N. N., Dmitriyev, V. A., Kulikov, G. V., Nechin, Yu. A., Solov"yeva, V. I., Strugal'skiy, Z.S., and Khristiansen, G. B.

TITLE: Study of lateral-distribution function of charged particles and of the energy density of the electron-photon component of extensive air showers

SOURCE: International Conference on Cosmic Radiation. Moscow, 1959. Trudy. v. 2. Shirokiye atmosfernyye livni i kaskadnyye protsessy, 117-122

TEXT: The data obtained by means of the diffusion chamber and the hodoscoped counters permit determining the particle distribution in the neighborhood of the shower axis as well as at large distances from it. These data can be used for determining the number of particles and the position of the axis to an accuracy of approximately 1 m by means of the hodoscoped counters, and to an accuracy of several centimeters if the axis lies within the limits of the diffu-

Card 1/5

Study of lateral-distribution ...

S/627/65/002/000 ... ...
D299/D305

sion chamber. The electron-photon component at large distances from
the axis was studied by means of large ionization chambers, shielded with lead. During 1000 hours of operation, 28 cases were recorded of the axis (of showers with number of particles $N \geqslant 10^5$ passing through the core detector. All these showers were investigated in detail with respect to distribution and energy of particles. The cases most favorable for analysis are those, in which the shower axis lies in the diffusion chamber. In all, 8 such cases were recorded. For each of these showers, the lateral-distribution function of particle density was constructed for distances ranging from 5 cm to 1 m from the shower axis. It was found that the form of the distribution function varied from shower to shower in the core region. In that region, a peculiar feature of particle distribution was observed, namely a narrow beam (4 cm in diameter) of particles, consisting of a large number (4 to 15) of particles with collinear tracks. From data obtained by means of the hodoscoped counters and knowing the position of the shower axis, it is possible to construct the distribution function of charged particles up to a distance of r = 25 m. from the axis, for each individual

Card 2/5

Study of internal-distribution ...

...wer. Then the experimental distribution
with the theoretical functions of ...
...ts of the comparison are shown in a t...
...d in the form of the distribution of ...
...ctron-photon component in the individ...
r ~ 1 m, and at large distances from th...
...al fluctuations in the form of the energy distribution in the core.
In each of the investigated showers, the energy flux of the elec-
-ron-photon component was found within a radius of 25 m; it turned
out that the electron-photon component energy-flux was stronger
(on the average) in showers with small s, than in showers with
large s (s being the "age parameter"). The system of counters per-
mitted recording showers with number of particles $N = 10^4$ to 10^7.
The data yielded by the diffusion chamber were used for construct-
ing the distribution function for distances $r < 1$ m from the shower
axis. The conclusion was reached that the form of the electron-
photon energy distribution-function does not depend on the number
of particles in the shower. Therefore, all the data were referred
to a shower with same N, and the average energy-density distribu-

Card 3/5

Study of lateral-distribution ...

S/627/60/002/000/008/027
31576
D299/D305

tion constructed. Approximating this distribution by a power law of type r^{-n}, one obtains for the exponent n the following values (as a function of the distance r from the axis):

$$n = 1,2 \pm 0,2, \qquad 0,1 < r < 1 \text{ m}$$

$$n = 1,5 \pm 0,2, \qquad 1 < r < 10 \text{ m}$$

$$n = 2,0 \pm 0,3, \qquad 10 < r < 60 \text{ m}$$

$$n = 2,6 \pm 0,2, \qquad 60 < r < 1000 \text{ m}$$

Further, the mean energy per electron was obtained from experimental and theoretical values (based on the cascade shower theory of the mean energy as a function of r showed a discrepancy which can be removed by taking into account the effect of nuclear scattering. The experimental values permit calculating the energy of the

Card 4/5

S/627/60/002/000/006/02⁻
D299/D305

Study of the lateral-distribution ...

electron-photon component, viz. E_{eph} = 2.5 BN, where B denotes the mean energy loss per unit of depth t. There are 2 figures, 1 table and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: J. Nishimura, K. Kamata. Suppl. Theor. Phys., no. 6, 1958.

Card 5/5

NECHIN, YU.A.

3,2410 (1559, 2705, 2865)

AUTHORS: Vernov, S. N., Goryunov, N. N., Dmitriyev, V. A., A-likov, G. V., Nechin, Yu. A., and Khristiansen, G. B.

TITLE: Study of high-energy nuclearactive component of extensive air showers at sea level

SOURCE: International Conference on Cosmic Radiation. Moscow, 1959, Trudy. v. 2. Shirokiye atmosfernyye livni i iadkadnyye protsessy, 123-131

TEXT: The high-energy nuclearactive component was studied by the apparatus of Moscow State University. The nuclearactive component was detected and measured by means of hodoscoped counters and ionization chambers. The processed hodoscope data permitted determining the total number of particles N and the distance R_1 of the shower axis from the ionization chambers. Part of the data were processed by the electronic computer of Moscow State University; thereby the number of particles was determined to an accuracy of approximately

Card 1/4

Study of high-energy ...

S/627/60/002,000/004,027
D299/D305

20%, and the position of the axis to within 0.25 m, provided it fell inside the area of a detector of 4 m². The joint processing of the data of the hodoscope and ionization chambers yielded the mean energy of the nuclearactive component of showers of various number of particles, the energy spectra of the nuclearactive particles in the central part of the shower, the lateral distribution of the energy flux carried by the nuclearactive component in the central part of the shower and the lateral distribution of the nuclearactive particles. Showers, whose axes were at a distance of less than 10 m from the detector of nuclearactive particles, were selected for further study. These showers were divided into 4 groups according to number of particles; over 1000 such showers were investigated. The integral spectra of nuclearactive particles of energies $E_{n,i} < 10^{12}$ ev. were obtained for the 4 groups. The integral spectra of nuclearactive particles, averaged over the showers of all the groups, can be approximated by an exponential function with exponent $\gamma = -1.0 \pm 0.2$. For showers with large N (group 4), the value of γ shows a decreasing tendency. The space distribution of the energy flux near the

Card 2/4

Study of high-energy ...

S/627/60/002/000 ...

axis can be approximated by an exponential function with exponent
n = - 1.5 + 0.2. A typical correlation was established between the
electron-photon and the nuclearactive components of cores of the in-
dividual showers, namely showers with an electron-photon component
of an energy much higher than the average, have as a rule a nu-
clearactive component of lesser energy. The converse was also ob-
served. The measurements gave direct evidence of the presence of nu-
clearactive particles of high-energy ($\sim 10^{12}$ ev.) in showers at sea
level, and of the considerable importance of the nuclearactive com-
ponent in the energy balance of the shower. The nuclearactive com-
ponent in the central part of the shower carries an energy which is
(on the average) almost as large as the entire energy of the elec-
tron-photon component at the level of observation. The presence of
considerable energy in the nuclearactive component affects the ab-
sorption of particles in the shower. The development of individual
showers can differ considerably, as the magnitude of the energy of
the nuclearactive component differs considerably in the individual
showers. The main contribution to the energy flux carried by the nu-

Card 3/4

Study of high-energy ...

J1427
S/627/60/002/000/UUJ/027
D299/D305

clearactive component within a circle of given radius is made by high-energy particles, whose lateral distribution is such that, on the average, all the particles with energy $> 10^{12}$ ev. are contained in a circle of radius $r = 1$ m. The distribution of the energy flux carried by the nuclearactive component showed that this flux is fairly widely distributed. Further, the transverse momentum imparted to the particles (during their generation), was estimated. The nuclearactive component of showers with $N \sim 10^4$ to 10^6 at sea level carries an energy of 0.5 to 1.0 of the total energy, carried by the electron-photon component. As a result of the energy fluctuations of the nuclearactive component in the individual showers, the development of the showers fluctuates, too. The distribution of the energy flux of the nuclearactive component over a region of $1 < r < 20$ m near the axis is described by the law $r^{-2 \pm 0.25}$; such a distribution should affect the characteristics of the soft component. There are 4 figures, 1 table and 10 references: 9 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: J. Nishimura, K. Kamanta.Suppl. Prog.Phys.,no.6, 1958.

Card 4/4

AUTHORS: Vernov, S. N., Babetskiy, Ya. S., Goryunov, N. N., Kulikov, G. V.,
Nechin, Yu. A., Strugal'skiy, Z. S., Khristiansen, G. B.

TITLE: On the Structure of the Core and the Central Regions of Extensive
Atmospheric Showers at Sea Level (O strukture stvola i tsentral'-
nykh oblastey shirokikh atmosfernykh livney na urovne morya)

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36,
Nr 4, pp 976-984 (USSR)

ABSTRACT: The object of the present paper was an experimental investi-
gation of the spatial distribution of the energy flux of the
electron-photon and the nuclear-active component in the core
and the central regions of extensive air showers; the present
paper is a continuation of an article published in the pre-
ceding issue of this periodical (Ref 1), in which the method
and the experimental arrangement were already described.
Figure 1 is a schematical representation of the chamber system
with the distribution of hodoscope counters. The counters were
located in groups of 12 and 24 in containers. The ionization
chambers had a total area of 4 m^2. In the course of the 1800
Card 1/4   hours during which the apparatus was in operation, about 18000

VERNOV, S.N.; GORYUNOV, N.N.; DMITRIYEV, V.A.; KULIKOV,G.V.; NECHIN, Yu.A.; KHRISTIANSEN, G.B.

Function of the spatial distribution of a flux of charged particles in an individual extensive air shower. Zhur. eksp. i teor. fiz. 38 no.1:297-298 Jan '60.   (MIRA 14:9)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta.

(Cosmic rays)

NICHIN, F. A., KELE T, . . ., FLER , . . ., .V , . .,

BELYAYEVA, J. F., ATRADHKEVID, . J., DMITRIYEV, V. A., A'H ... .

   "The Structure of Extensive Air S ower t Sea Level."

report submitted for the Intl. Conf. on Cosmic Rays and Earth Storm for a
Kyoto, Japan .-15 Sept. 1 61.

NECHIN, YU. A.

3.2 4/0 (2205, 2705, 3905)

S/048/62/026/005/014/022
B102/B104

AUTHORS: Vernov, S. N., Khristiansen, G. B., Belyayeva, I. P.,
           Dmitriyev, V. A., Kulikov, G. V., Nechin, Yu. A.,
           Solov'yeva, V. I., and Khrenov, B. A.

TITLE: The primary cosmic-ray component at superhigh energies and
           some peculiarities of its interaction with nuclei of air
           atoms

TEXT: The paper is a report on experiments with the Moscow University

large apparatus (area $4 \cdot 10^4$ m^2) for comprehensive studies of extensive

air showers induced by high-energy cosmic particles. The charged-particle

detectors (Geiger counters in hodoscope arrangement) cover an area of

110 m^2, the muon detectors (2-3 counter layers shielded with lead and iron,

in hodoscope arrangement) more than 12 m^2, 6.3 m^2 of which are under

Card 1/8 3

4

S/048/62/026/005/014/022
B102/B104

The primary cosmic-ray component ...

40 m water equivalent. The nuclear-active-particle detectors form a system of 128 ionization chambers ($8 m^2$) shielded by lead and graphite filters. The number of muons produced in charged-pion decay was estimated (the pions were assumed to be formed in gamma-quantum photoeffect on nuclei of air atoms): $N_\gamma(E) < \gamma_0 E_0 / 1.8(1-\alpha)E$, $\alpha < 0.5$, $\gamma_0 < 10^{-3}$; for $E_0 \sim 10^{16}$ ev and $E_\mu = 10^{10}$ ev ($\alpha = 0.5$), $N_\mu^\gamma(10^{10}) < 10^5$.

The number N_μ^n of muons in nuclear showers was measured. For showers with $N = 7 \cdot 10^6$ a mean number of $8 \cdot 10^4$ muons with $E \geq 10^{10}$ ev is to be expected. The spatial muon flux distribution was determined for these two types of showers (ϵ_μ^n and ϵ_μ^γ). In the case of a simple model of air shower production (Suppl. Nuovo Cimento, 2, 649, 1958), an analysis of the experimental data yields $N = k_e E_0 \exp(-x + x_m + x_0)/\Lambda$; E_0 is the energy of the primary particle, x_0 is the depth of its first interaction, $x_m = \beta \log E_0$ (x - depth of observation), N is the total number of

Card 2/4

4

The primary cosmic-ray component ...

S/048/62/026/005/014/022
B102/B104

shower particles; the number of muons $N_\mu = k E_0'$; $\Lambda = 200$ g/cm^2,

$B = 30$ g/cm^2 and $\alpha = 0.8 \pm 0.1$. If the primary energy spectrum has the

shape $A E_0^{-(\gamma+1)} dE_0$, at fixed N the N_μ distribution has the shape

$1/. \left(\frac{\gamma+B}{\cdots} - \cdots 1 \right)$

N dN_μ, Λ being the mean free path with respect to inter-

action. Comparison between experiment and theory yields $\Lambda = (65\pm5)$ g/cm^2,

as an upper limit. For charged muons their energies (E_μ) and numbers

(n_μ) were measured and calculated for several altitudes H; W is the

probability for a charged pion produced at H decays without interacting
with an air nucleus. The results indicate that in ~ 5% of all cases
nuclear interaction is accompanied by a production of narrow beams of
great numbers of charged pions. There are 8 figures.

Card 3/4

, S. N.;   KHRISTIANSEN, G. B.;   ABROSIMOV, A. M.;   KHRENOV, DMITRIYEV, V. A.
..EVA, V. I.;   SOLOVYEV, K.I.;   BELYAYEVA,M.F.;   NECHIN, Yu. A.;   VEDENEYEV,O.K.;
..., G. V.;   FOMIN, Yu. A.

...ary of the new data on EAS structure obtained with the aid of the complex
equipment of Moscow State University.

..port submitted foe the 8th Intl. Conf. on Cosmic Rays (IUPAP) Jaipur, India,
2-14 Dec 1963

L 40709-65 EWG(J)/EWT(m)/FCC/T   IJP(o)

AUTHOR: Yernov, S. N.; Khristiansen, G. B.; Abrosimov, A. T.; Belyayeva, I. F.; Dmitriyev, V. A.; Kulikov, G. V.; Nechin, Yu. A.; Solov'yeva, V. I.; Khrenov, B.A.

TITLE: New data on the study of broad atmospheric showers using a complex apparatus /Report of All-Union Meeting on Cosmic Rays Physics, held in Moscow from October 4 to 10, 1963/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 28, no. 11, 1964, 1886-1893

TOPIC TAGS: cosmic ray shower, nuclear particle, nuclear physics apparatus

ABSTRACT: Experiments are described that were conducted at Moscow State University on a complex apparatus for the study of broad atmospheric showers and the mu-meson component of cosmic rays. The apparatus gave simultaneous information on the electron-photon, mu-meson, and nuclear-active components of broad atmospheric showers in each individually recorded shower. Orig. art. has: 9 graphs, 3 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta im. N. V. Lomonosova (Scientific Research Institute of Nuclear Physics, Moscow State University)

SUBMITTED: 00   ENCL: 00
NO REF SOV: 003   OTHER: 006   SUB CODE: AA, NP
                                                     JPRS

Card 1/1

TELOV, S.T.; PL ITTSA, ...; ABACTICA, A.T.; ATLASTRU TOD, .E.;
BELYAYEV, I..; VEDENYEV, C. .; I DU NEN, .A.; LIVC.;
LBALE, Yu.A.; SOLOVYEVA, ..; SOLEN, E.I.; DIE, ...;
ICV, E.A.

Description a modernized omplex set for matching expan-
sive wire antennas. Izv. Al SSS: Ser. fiz. 1. 7 2 7
D 62   (. .)

VERNOV, S.N.; KHRISTIANSEN, G.B.; ABROSIMOV, A.T.; ATRASHKEVICH, V.B.,
     BELYAYEVA, I.F., VEDENEYEV. O.V.; KULIKOV, G.V.; FOMIN, Yu.A.;
     NECHIN, Yu.A.; SOLOV'YEVA, V.I.; KHRENOV, B.A.

Fluctuations in the development of extensive air showers with
a fixed total number of charged particles and a fixed total
number of muons. Izv. AN SSSR. Ser. fiz. 29 no.9:1676-1681
S '65.   (MIRA 18:9)

L 4528-66   EWT(m)/ECC/T   IJP(c)

ACC NR: AP5024632   SOURCE CODE: UR/0044/65/029/009/1676/1681

AUTHOR: Vernov, S.N.; Khristiansen, G.B.; Abrosimov, A.T.; Atrashkevich, V,D.; Belyayeva, I.F.; Vedeneyev, O.V.; Kulikov, G.V.; Fomin, Yu. A.; Nechin, Yu. A.; Solov'yeva, V.I.; Khrenov, B.A.

ORG: none

TITLE: Investigations of fluctuations in the development of extensive air showers with a fixed total number of charged particles and a fixed total number of muons /Report, All-Union Conference on Cosmic Ray Physics held at Apatity 24-31 August 1964/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 9, 1965, 1676-1681

TOPIC TAGS: cosmic ray shower, muon, charged particle, extensive air shower, particle distribution, particle distribution

ABSTRACT: The authors have employed the modernized installation at Moscow State University, described elsewhere (S.N.Vernov et al., Izv. AN SSSR Ser. fiz., 28, 2087, 1964), to investigate the simultaneous distribution of total number N of charged particles, total number M of muons, and age parameter S in extensive air showers. Showers were selected for which the zenith angle of the axis was less than 30°. M was determined from the number of muons recorded by the muon detector and the perpendicular distance of the muon detector from the shower axis with the aid of the known lateral distribution of muons. The relative error in determining M did not exceed 35 %. The

Card 1/2

L 4528-66

ACC NR: AP5024632

error in determining S was estimated to be 0.02 by proccssing "artificial" showers of known age, calculated by Monte Carlo methods. The data presented were derived from some 300 showers with total numbers of charged particles ranging from 10^5 to 4×10^6. Histograms are given showing the distribution of showers with respect to N with fixed M, with respect to M with fixed N, with respect to S with fixed N, and with respect to S with fixed M, and scatter plots are given for N versus S with fixed M and for M versus S with fixed N. The correlation coefficient of S with M for fixed N ranged between 0.62 and 0.72; the correlation coefficient of S with N for fixed M was - 0.67. Orig. art. has: 10 formulas, 4 figures, and 1 table.

SUB CODE: NP/   SUBM DATE: 00/   ORIG REF: 006/   OTH REF: 001

Card   2/2

ACC NR: AP6031853   SOURCE CODE: UR/0367...

TITLE: Vernov, ...; ...yayova, ...; ...aneyov, ...; ...; Nechin, Yu. A.; Khristiansen, G. B.

ORG: In tute of Nuclear Physics, Moscow State University (Institut yadernoy ... Moskovskogo gosudarstvennogo universiteta)

TITLE: Fluctuations of the energy fluxes of the nuclear-active and electron-photon components in extensive air showers /This paper was given at the 14th Annual Conference on Nuclear Spectroscopy, Tbilisi, February 1964/

SOURCE: Yadernaya fizika, v. 2, no. 6, 1965, 1075-1086

TOPIC TAGS: extensive air shower, electron, photon

ABSTRACT: Experimental data are given on the fluctuations of the energy flux of the nuclear-active and electron-photon components in extensive air showers and on the connections of these fluctuations with each other and with fluctuations of the age parameter s. It is shown that the bulk of these data disagrees with the model described by Nymmik and Shestoperov (Materials on the All-Union Conference, Apatites, 1964). The large role of the parameter s and other characteristics for the correct setting-up of experiments concerning extensive air-showers are discussed. Orig. art. has: 10 figures and 3 tables. /Based on authors' Eng. abst./ /JPRS/

SUB CODE: 03 / SUBM DATE: 23Apr65 / ORIG REF: 014 / OTH REF: 005

Card 1/1

ACC NR: AP7007082

SOURCE CODE: UR/0048/66/030/010/1694/1696

AUTHOR: Vernov, S. N.; Khristiansen, G. B.; Nechin, Yu. A.; Stoyanova, D. A.; Khrenov, B. A.

ORG: none

TITLE: Groups of particles at a depth of 40 meters entering into the composition of broad atmospheric showers /Paper presented at the All-Union Conference on Cosmic Radiation Physics, Moscow, 15-20 Nov 1965/

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 10, 1966, 1694-1696

TOPIC TAGS: muon, physics conference

SUB CODE: 20,04

ABSTRACT: A study of the flux of particles at a depth of 40 m underground was made using the Moscow State University installation for the investigation of broad atmospheric showers. The purpose of the work described was determination of the shower-forming capacity of particles belonging to non-Poisson groups observed in the vicinity of the axis of showers. By assuming that the particles present in the groups observed were muons and using the experimental data obtained, the authors estimated that the average energy of muons in these shower-forming groups was $10^{12} < E_\mu < 10^{13}$ ev. The determination of the shower-forming capacity is of value in estimating the full amount of energy carried away by a muon group in a broad atmospheric shower. It was shown that the muons in a group have an energy of $\sim 10^3$ Bev $< E_\mu < 10^4$ Bev. This indicates that a muon group cannot carry away more than 10% of the energy of a primary particle, and therefore cannot be responsible for the escape of a signi-

Card 1/2

ACC NR: AP7007082

ficant amount of energy in the atmosphere. Presence of concentrated groups of high-energy muons ($B \gtrless 10^{12}$ ev) at a depth of 40m cannot be explained from the standpoint of theoretical concepts concerning the development of broad atmospheric showers that have hitherto been advanced. Orig. art. has: 4 figures. /JPRS: 39,658/

Card 2/2

(6

ACC NR: AP7007081

AUTHOR: Vernov, S. N.; Khristiansen, G. B.; Abrosimov, A. T.; Atrashkevich, V. B.; Belyayeva, I. F.; Vedenoyev, O. V.; Kulikov, G. B.; Nechin, Yu. A.; Solov'yeva, V. I.; Fomin, Yu. A.; Khrenov, B. A.

ORG: none

TITLE: Phenomenological characteristics of broad atmospheric showers with a fixed number of μ-mesons and electrons /Paper presented at the All-Union Conference on Cosmic Radiation Physics, Moscow, 15-20 Nov 1965/

TOPIC TAGS: mu meson, cosmic radiation

SUB CODE: 20

ABSTRACT: In an earlier work by Vernov et al (Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 29, 1676, 1965), results obtained in a study at an installation of Moscow State University on broad atmospheric showers with zenith angles of 0-30° were reported. These results included the distribution of showers with a fixed number of electrons N_e with respect to the number of high-energy mesons N_μ and the age parameter S, distribution of showers with a fixed N_μ with respect to N_e and S, and the coefficients of the correlation between S and the fluxes of electrons and μ-mesons. In the work reported in this instance, the same relations were determined for broad atmospheric showers with zenith angles of 30-45°. The fluctuations of N_μ, S, and N_e, observed for an effective atmospheric depth of 1240 g/cm^2, were the same as those for vertical showers established in the earlier work. To determine the differences due to an increase in

Card 1/2

ACC NR: AP7007081

the effective atmospheric depth of 200 g/cm^2, calculations must be carried out
with greater statistical precision. When results of the theoretical calculations
on characteristics of broad atmospheric showers at 1240 g/cm become available,.
the experimental data reported will be useful for the determination of the compo-
sition of primary cosmic radiation in the superhigh-energy range. [JPRS: 39,638]
Orig. art. has: 3 figures, 2 formulas and 1 table.

Card 2/2

SPESHNEVA, Z.V. [Spieshn'ova, Z.V.], kand.sel'skokhoz.nauk; NECHINENNAYA,
T.V. [Nechny'onnaia, T.V.], mladshiy nauchnyy sotrudnik

Dynamics of wool development in Askaniya sheep. Nauk.pratsi
"Ask.-Nov." 9:35-44 '61.   (MIRA 15:3)
                (Sheep breeds)   (Wool)

MECHTENKY, D. K.

MECHTENKY, D. K., Cand. of Vet. Sci.
    "Use of acriflavine in hemosporidioses of cattle."
SO: Vet. 24(3), 1947, p 41

PA 22/49T76

NECHINENNYY, D. K.

Sep 48

USSR/Medicine -- Sheep
    Medicine -- Parasites

"Tests of the Use of Novoplasmin (LP4) in Cases of Haemosporidiosis in Sheep," D. K. Nechinennyy, Cand Vet Sci, O. A. Amelina, Co-Worker, Krymsk Sci Res Vet Experimental Sta, 2½ pp

"Veterinariya" No 9

Presents results of experiments on 50 sheep. Recommends use of novoplasmin (LP4) for treating subject disease.

22/49T76

NECHINENNYY, J, K

NECHINENNYY, D. K.

22614   Lechebno-Profilakticheskiye Svoystva LP_2 I LF_4 Pri Gemosporidiozakh
Ovets. Veterinariya, 1949, No. 7, S. 14-15

SO: Letopis' 30, 1949

NECHINENNYY, J, K

NECHINENNYY, D. K.

USSR/Biology-Extermination of Pests

May 51

"Aerosol Method for the Extermination of Ectoparasites," V. I. Kurchatov, F. A. Potunin, V. M. Romanov, D. K. Nechinennyy

"Veterinariya" Vol XXVIII, No 5, pp 45-47

Describes constr of AAG appliance (automobile aerosol generator) which is portable and consists of a tank, siphon tube, and nozzle-equipped bent tube which serves for spraying and is attached to automobile exhaust tube in operation. Automobile exhaust gases disperse oil soln of DDT or hexachlorocyclohexane. Refers to larger and more powerful aerosol sprayer and describes experience obtained with method and its possibilities in farm and vet practice.

182T2

USSR/Medicine (Veterinary) - Carriers   Nov 51
       of Infectious Diseases

"Experience in the Fight Against Ectoparasites of
Farm Animals During the Period When They Are Kept
in Stalls," V. I. Kurchatov, Dr Vet Sci, D. K.
Mechinennyy, Cand Vet Sci, Chief Vet Div, Crimea
Oblast Agr Adm, V. M. Romanov

"Veterinariya" Vol XXVIII, No 11, pp 45, 46

Describes experience in use of hexachlorane and DDT
on animals in the Crimea kept during the winter in
stalls and suffering from tick infestation. The
ticks include H. scupense (transmits blood parasites

PA 190T82

USSR/Medicine (Veterinary) - Carriers   Nov 51
       of Infectious Diseases (Contd)

N. equi and Th. annulata causing nuttelliosis and
theileriasis in the spring), Ripicephalus bursa,
Dermacentor marginatus, Hemaphysalis punctata,
Hemaphysalis otophila, and Dermanissus.

Same issue, p. 63, listed above under "New Books on
Veterinary Medicine"
So: Rpt. U-4502, 28 Aug 1953

MECHINENNYY, D.K.

NECHINENNYY, D.r., kandidat veterinarnykh nauk, ..., ? h., kandidat
veterinarnykh nau..

Toxicity of chlorotnenser...'s for animals. veterinariia 34
no.?.32-83 S '57.   (VLRA 1^ -

.. Krymskaya nauchno-issledovntel'skaya veterinarnaya stantsiya
(Pyridine--Toxicology)

NECHINENNYY, D.K., kand.veterinarnykh nauk

Crimean Veterinary Research Station. Trudy VIEV 23:379-384 '59.
(MIRA 13:10)

(Crimea--Veterinary research)

KURCHATOV, V.I., doktor biol.nauk; NECHINENNYY, D.K., kand.vet.nauk;
     ROMANOV, V.M.

     Eradication of parasitic diseases of livestock and poultry in the
     Crimea. Veterinariia 36 no.7:16-19 Jl '59.   (MIRA 12:7)

     1. Krymskaya nauchno-issledovatel'skaya veterinarnaya stantsiya
     (for Kurchatov, Nechinennyy). 2. Nachal'nik veterinarnogo otdela
     Krymskogo oblastnogo upravleniya sel'skogo khozyaystva (for Romanov).
              (Crimea--Ticks as carriers of disease)

NECHIMENNYY, D.K., kand.veterinarnykh nauk; KARTASHEV, M.V., kand.
veterinarnykh nauk

Control of ectoparasites of birds in poultry houses.
Veterinariia 39 no.1:64-66 Ja '62.   (MIRA 15:2)

1. Krymskaya nauchno-issledovatel'skaya veterinarnaya
stantsiya.
                    (Poultry--Diseases and pests)

NECHIPORCHUK, I.D.

Wheat

Some conditions favoring the degeneration of ramose wheat. Agrobiologiia, No. 4, 1952.

Monthly List of Russian Accessions. Library of Congress. November 1952. Unclassified.

NECHIPORCHUK, I., PAVLISHIN, M.

"Controlled Growing of Winter Wheat Plants with Unstable Heredity." Tr. from the Russian.
P. 28. (ZA SOCIALISTICKE ZEMEDELSTVI, Vol. 4, no. 1, Jan. 1954, Praha, Czechoslovakia)

So: Monthly List of East European Accessions, LC, Vol. 3, No. 5, May 1954/Unclassified

NECHIPORCHUK, I.D., kandidat sel'skokhozyaystvennykh nauk.

Some cases of appearance of new forms in hops. Agrobiologiia no.4:
136 Jl-Ag '56.   (MLRA 9:10)

1.L'vovskiy sel'skokhozyaystvennyy institut.
        (Hops) (Botany--Variation)

NECHIPORCHUK, I.D., kandidat sel'skokhozyzystvennykh nauk.

Transformation of hops by changing groving conditions. Dokl.Akad.sel'khoz.
21 no.6:15-17 '56.   (MIRA 9:9)

1.L'vovskiy sel'skohozyaystvennyy institut. Predstavlena akademikem
I.V.Yakushkinym.
                  (Hops)

NECHIPORCHUK, I.D., doktor sel'skokhozyaystvennykh nauk

Effect of peat soils on the quality of seed potatoes. Agrobiologiia
no. 3:128-129 My-Je '58.   (MIRA 11:7)

1. L'vovskiy sel'skokhozyaystvennyy institut.
                        (Seed potatoes)
                        (Peat soils)

NECHIPORCHUK, I.D., doktor sel'skokhoz. nauk

Fall sowing of spring wheat hybrids. Agrobiologiia no.4:619-620
Jl-Ag '59.   (MIRA 12:10)

1.L'vovskiy sel'skokhozyaystvennyy institut.
                    (Wheat)

POSHPUR, A.A., NECHIPORCHUK, L.D., doktor sel'khoz. nauk

Making use of the qualitative differences of hop tissues in hop production. Agrobilogiia no.5:761-763 S-O '60.   (MIRA 13:10)

1. Sel'skokhozyaystvennyy institut, L'vov.
                              (Hops)

NECHIPORCHUK, I.D., doktor sel skokhozyaystvennykh nauk; PAVLISHIN, N.N.;
POLYAKOVA, ... ; DROTUK, F.?

Occurrence of natural accretion of hawthorn and medlar.
Agrobiologia no.: 918 920 N-D 61.   (MIRA 15.2)

1. L'vovskiy sel'skokhozyaystvennyy institut.
              (Hawthorn)   (Medlar)

NECHIPORCHUK, ..., IP I.; PAVLICHIN, M.N.

Transforming winter wheat by directed conditioning of plants with
loosened heredity. Agrobiologiia n 2:272-277 Mr-Ap '57.

(MIRA 10:7)

1. L'vovskiy sel'skokhozyay stvennyy institut.
(Wheat)

NECHIPORENKO, A.A.

Preparing malt from wheat. Spirt. prom. 23 no.3:33-36 '57.

(MIRA 10:6)

1. Michurinskiy spirtovoy zavod.
                    (Malt)   (Wheat)

USTINNIKOV, B.A.; LEVCHIK, A.P.; NECHIPORENKO, A.A.

Wet grinding of grain in hammer mills. Spirt. prom. 24 no.1:34-35
'58.   (MIRA 11:3)
              (Distilling industries)
              (Grain-milling machinery)

USTINNIKOV, B.A.; ROCHIPORENKO, A.A.

Continuous cooking of starchy raw materials at the Michurinsk
Alcohol Plant. Spirt.prom. 25 no.1:25-28 '59. (MIRA 12:2)
                (Michurinsk--Alcohol)

NECHIPORENKO, A.-A.; KELEYNIKOV, Ye. T.

Mechanized feeding of formalin. Spirt. prom. 29 no.3:18-21 '63.
                                                    (MIRA 16:4)

1. Michurinskiy eksperimental'nyy spirtovoy zavod Vsesoyuznogo
nauchno-issledovatel'skogo instituta fermentnoy i spirtovoy
promyshlennosti.

            (Formaldehyde)
            (Fermentation--Equipment and supplies)

YAKOVENKO, V.I.; [illegible]; [illegible], A..; [illegible], L.A.

Processing of sugar beets in a mixture with grain and potato raw
materials and molasses. Ferm. i spirt. prom. 31 no.6:37-40 '65.
(MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy
i spirtovoy promyshlennosti (for Yakovenko, Ustinnikov).
2. Michurinskiy spirtzavod (for [illegible], Perepperenko).

NECHIPORENKO, A.G.; PRIK, R.D.

        Presses for plastics. Kuz. shtam. proizv. I no.10:42-44 0 '59.
                                       (MIRA 13:2)
     (Plastics--Molding) (Hydraulic presses)

NECHIPORENKO, A.G.; PRIK, R.D.

The P914S and P917S presses for plastics. Biul. tekh.-ekon. inform.
no.10:13-15 '59.   (MIRA 13:3)
        (Power presses) (Plastics—Molding)

NECHIPORENKO, A.I.; OSTRENK(, V.Ya.

Ways of automating pipe mills. Mot. 1 gcrncr.d. pr3m. n:. <:
40-41 Mr-Ap '64.   (MIRA 1:0)

NECHIPORENKO, A.I.; YANCHENKO, B.M., TIMOFEYEV, Yu.I.

Mechanization and automation of pipe finishing. Met. i gornorud. prom. no.5:36-38 S-O '64.   (MIRA 18:7

NECHIPORENKO, A.Z.; NECHIPORENKO, N.A.

Diagnosis of vesical rupture. Urologiia 24 no.2:63-64 Mr-Ap '59.

(MIRA 12:12)

(BLADDER, rupt.
    diag. (Rus))

NECHIPORENKO, A.Z.

Intravenous morphine anesthesia in urological practice. Urologiia
no.6:57-58 '60.   (MIRA 15:5)
                    (MORPHINE)   (UROLOGY)

NECHIPORENKO, A. Z.

Perforation of the kidney and ureter by a catheter. Urologiia
no.3:14-16 '61.   (MIRA 14:12)

(KIDNEYS—WOUNDS AND INJURIES)
(URETERS—WOUNDS AND INJURIES)

NECHIPORENKO, A.Z.

Traumatic ossifying myositis as a complication of intraosseous
osteosynthesis. Ortop.,travm.i protez. 22 nc.4:73 Ap '61.

(MIRA 14:11)

(INTERNAL FIXATION OF FRACTURES)
(MUSCLES - DISEASES)

NECHEPORENKO, A. Z.

Significance of detecting Sternheimer-Malbin cells in the urine
in the diagnosis of chronic pyelonephritis. Urologiia no.2:6-12
'62.   (MIRA 15:4)

      (KIDNEYS--DISEASES)
      (URINE--ANALYSIS AND PATHOLOGY)

NECHIPORENKO, A.Z.

Eighth Congress of the Polish Urological Society, Urologiia
28 no.2:75-78 Mr-Ap'63.   (MIRA 16:6)
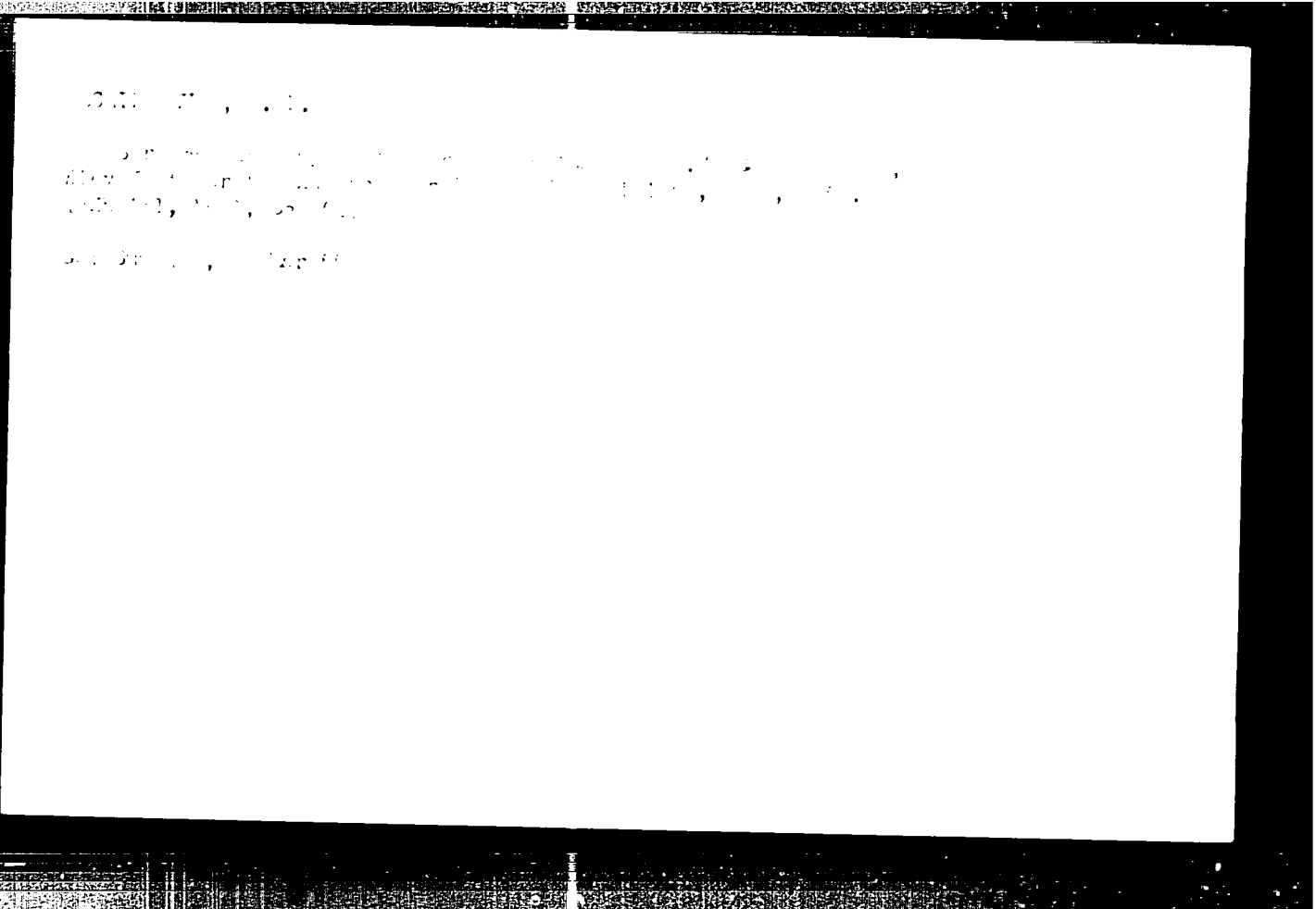   (UROLOGY—CONGRESSES)

NECHIPORENKO, A.Z.

"Surgery in kidney and ureter calculi" by I.P.Pogorelko.
Reviewed by A.Z.Nechiporenko. Sov. Zdrav. Kir. no.6:59-60
N-D'62.   (MIRA 16:6)
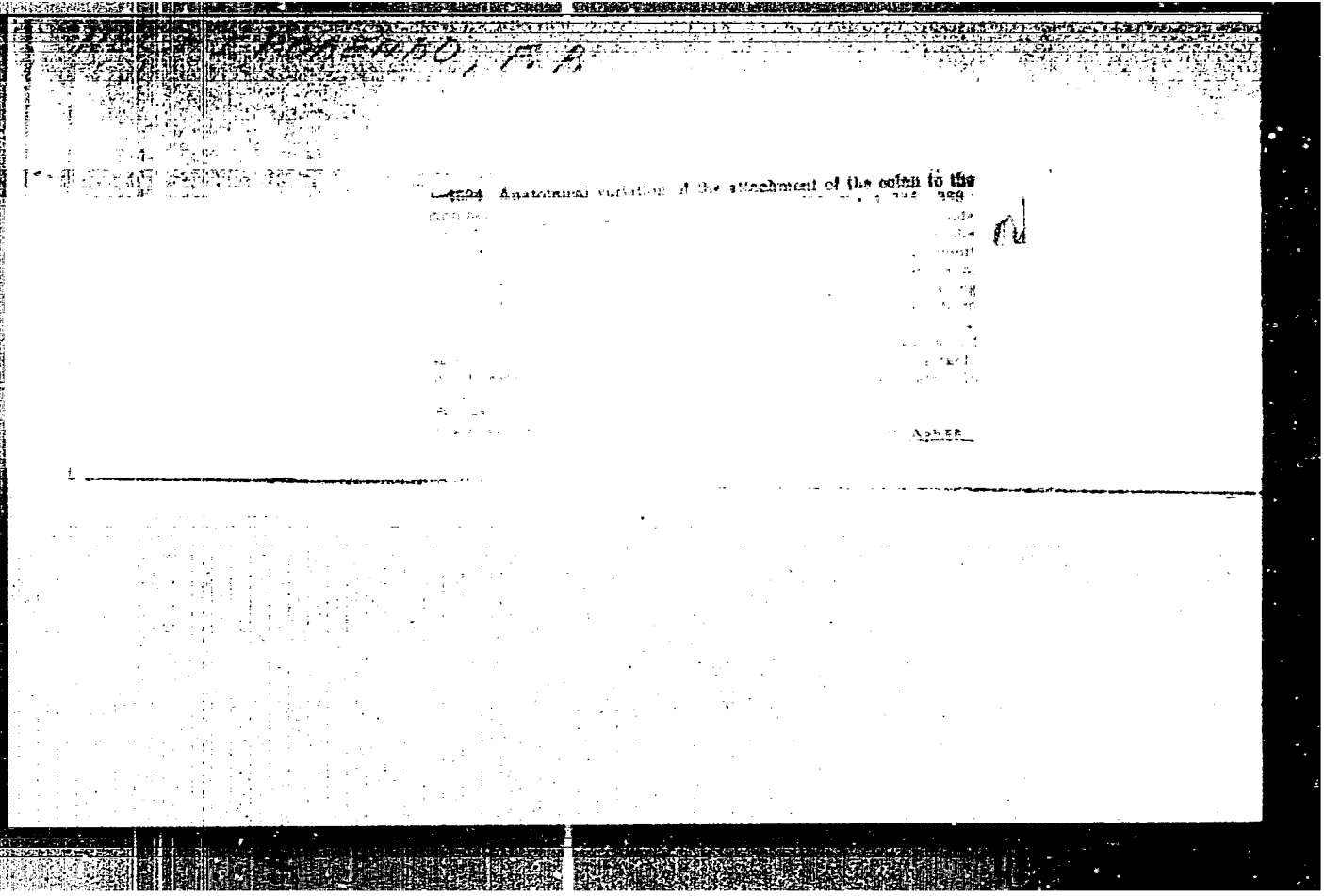   (CALCULI, URINARY)   (KIDNEYS—SURGERY)
             (URETERS—SURGERY)

NECHIPORENKO, A.Z.

Classification and treatment of varicocele. Urologiia. 29 no.2:
28-33 Mr-Ap '64.   (MIRA 18:7)

4204 Anatomical variation of the attachment of the colon to the

Asher

NECHIPORENKO, F.P.(Kiyev, ul. Mel'nika, d. 74, kv. 1)

Anatomical variations of the greater omentum in men and their sig-
nificance in surgical practice. Nov.khir.arkh. no.3:45-50 My-Je '57.
(MLRA 10:8)

1. Kafedra khirurgii II (zav. - zasluzhennyy deyatel' nauki I.I.
Kal'chenko) Kiyevskogo instituta usovershenstvovaniya vrachey
(OMENTUM--SURGERY)

NECHIPORENKO, F.P.

Conjunction of a bleeding leiomyoma of the small intestine with
duodenal ulcer. Nov.khir.arkh. no.4:96-97 Jl-Ag '59.
                                        (MIRA 12:11)
1. Kafedra khirurgii II (zav. - prof.I.I.Kal'chenko) Kiyev-
skogo instituta usovershenstvovaniya vrachey.
          (INTESTINES--TUMORS)   (DUODENUM--ULCERS)

1

NECHIPORENKO, P.P., dotsent (Kiyev,ul.Ovruchskaya,d.17,kv.24);
     POLYAKOV, N.G.

     Initial multiple malignant tumors of the gastrointestinal tract.
     Klin.khir. no.5:68-71 My '62.   (MIRA 16:4)

     1. Kafedra khirurgii II (zav. - prof. ILI.Kal'chenko)
     Kiyevskogo instituta usovershenstvovaniya vrachey.
                    (ALIMENTARY CANAL—CANCER)

NECHIPORENKO, F.P., dotsent

Neurinomas of the stomach. Klin.khir. no.8:46-52 Jl '62.
(MIRA 15:11)
1. Kafedra khirurgii II (zav. - zasluzhennyy deyatel' nauki, prof.
I.I.Kal'chenko) Kiyevskogo instituta usovershenstvovaniya vrachey.
(STOMACH—TUMORS)